

Phospho-Ser378 Parkin Antibody
Affinity purified rabbit polyclonal antibody
Catalog # AN1133

Specification

Phospho-Ser378 Parkin Antibody - Product Information

Application	WB
Primary Accession	O60260
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Calculated MW	52 KDa

Phospho-Ser378 Parkin Antibody - Additional Information

Gene ID	5071
Gene Name	PARK2

Other Names

E3 ubiquitin-protein ligase parkin, 632-, Parkinson juvenile disease protein 2, Parkinson disease protein 2, PARK2, PRKN

Target/Specificity

Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser378 conjugated to KLH.

Dilution

WB~~ 1:1000

Format

Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephosphopeptide affinity columns.

Antibody Specificity

Specific for the ~52k parkin protein phosphorylated at Ser378. Immunolabeling of the parkin band is absent in parkin S378 mutants.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Phospho-Ser378 Parkin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

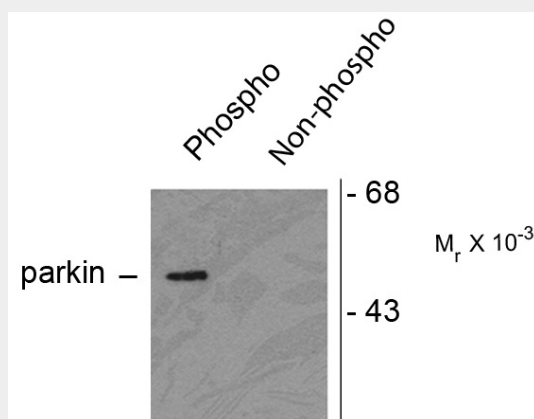
Blue Ice

Phospho-Ser378 Parkin Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Phospho-Ser378 Parkin Antibody - Images



Western blot of HEK293 cells transfected with Parkin WT (Phospho) and Parkin S378 mutant (non-phospho) showing the phospho-specific immunolabeling of the ~ 52 k parkin protein. The immunolabeling is absent in the parkin S378 mutant.

Phospho-Ser378 Parkin Antibody - Background

Parkin is an E3 ligase in the ubiquitin-proteasome system. Hereditary Parkinson's disease is most commonly caused by mutations in the parkin gene and is characterized by the progressive loss of dopaminergic neurons and the presence of Lewy bodies in the substantia nigra (Jenner et al., 1992). Recent evidence suggests that phosphorylation of parkin at Ser378 may have an important regulatory role on its E3 ubiquitin ligase activity (Yamamoto et al., 2005).

Phospho-Ser378 Parkin Antibody - References

Jenner P, Dexter DT, Sian J, Schapira AH, Marsden CD (1992) Oxidative stress as a cause of nigral cell death in Parkinson's disease and incidental Lewy body disease. *Ann Neurol.* 32 Suppl: S82-7.
Yamamoto A, Friedlein A, Imai Y, Takahashi R, Kahle PJ, Haass C (2005) Parkin phosphorylation and modulation of its E3 ubiquitin ligase activity. *J Biol Chem.* 280(5):3390-9